What is claimed is:

1. An optical system for measurement, wherein first and second optical paths intersected with each other at an intersection on a sample holder are set, wherein the first and second optical paths are formed so that light from a light source is projected so as to be converged on the intersection from an incoming side beam switching mirror selectively switches a direction of the light, via one of first and second converged light reflectors,

wherein first and second received light reflectors that projects the light to an exiting side beam switching mirror are disposed on the first and second optical paths respectively, and the exiting side beam switching mirror is capable of switching a direction of the light projected from one of the first and second received light reflectors so that the light is projected toward a detector, and

wherein intensity of light from the sample in case of face side incidence and back side incidence to the sample can be measured therein.

2. The optical system for measurement according to Claim 1, wherein the first and second converged light reflectors and first and second received light reflectors are elliptic cylindrical mirrors having an opening portion respectively

wherein each of the elliptic cylindrical mirrors can be

disposed so that center axes of the elliptic cylindrical mirrors are parallel to each other, and each focal axis of the elliptic cylindrical mirrors located on a common focal axis, and the elliptic cylindrical mirrors are coupled with each other at the respective opening portions, and

wherein the sample holder is placed on the common focal axis, the incoming side beam switching mirror and the exiting side beam switching mirror are disposed on remaining two focal axes respectively, and an incoming through hole and an exiting through hole are disposed on an incoming side and an exiting side of the elliptic cylindrical mirrors respectively.

3. The optical system for measurement according to claim 1, wherein the sample holder selectively positions sample and a reference sample at the intersection of the first and second optical paths, and the incoming side beam switching mirror and the exiting side beam switching mirror are rotatable with mutual relation, whereby reflectance and transmittance can be measured at arbitrary incident angle.

4. The optical system for measurement according to claim 3, wherein the reference sample is a through hole.

5. The optical system for measurement according to claim 2, wherein the sample holder selectively positions a sample and a reference sample at the intersection of the first and second optical paths, and the incoming side beam switching

mirror and the exiting side beam switching mirror are rotatable with mutual relation, whereby reflectance and transmittance can be measured at arbitrary incident angle.

6. The optical system for measurement according to claim 5, wherein the reference sample is a through hole.

7. The optical system for measurement according to claim 1, the exiting side beam switching mirror is independently rotatable.

8. The optical system for measurement according to claim 2, the exiting side beam switching mirror is independently rotatable.